

Amendments to the Specification:

Please replace [0002] with the following paragraph:

[0002] The invention relates to a liquid crystal display (LCD), and more particularly,
5 to [[an]] a LCD with a uniform common voltage and a method thereof.

Please replace [0006] with the following paragraph:

[0006] Please refer to Fig.1 and Fig.2. Fig.1 is a schematic diagram of [[an]] a LCD
10 according to the prior art, and Fig.2 is a section view of the structure of the LCD 10
shown in Fig.1. As shown in Fig.1, the LCD 10 has a display area 12 and a
non-display area 14 surrounding the display area 12. The display area 12 contains a
plurality of data lines 16 and a plurality of scan lines 18 arranged perpendicular to the
data lines 16 to form a pixel matrix (comprising a plurality of pixels 20), and a
15 plurality of pixel drivers comprising a plurality of electrical elements, such as thin
film transistors (TFTs) and capacitances, positioned on each intersection of the scan
lines 18 and the data lines 16. The non-display area 14 contains package testing
materials, signal transmitting wires, such as periphery circuit elements, repair lines,
and tape carrier packages (TCPs) 26, and a plurality of silver paste points uniformly
positioned in the non-display area 14. In the viewpoint of structure, the LCD 10
20 comprises a lower substrate 22, an upper substrate 24, and a plurality of liquid crystal
molecules (not shown) filled between the lower substrate 22 and the upper substrate
24. The upper surface of the lower substrate 22 contains the data lines 16, the scan
lines 18, the TCPs 26 (in the non-display area 14), and the TFTs (not shown). Each
data line 16 and scan line 18 are electrically connected to their corresponding TCPs 26
25 for transmitting signals to the lower substrate 22 so that the LCD 10 can show an
image. Each of the TFTs is positioned in an intersection of the data lines 16 and the
scan lines 18 as a switch element of the pixel 20. The lower substrate 22 further

contains a plurality of pixel electrodes 28 formed by a transparent conductive material layer electrically connected to the TFTs, and an alignment film (not shown) covering the TFTs and the pixel electrodes 28 for aligning the arranging direction of the liquid crystal molecules.

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Please replace [0009] with the following paragraph:

[0009] According to the conventional method for providing the common voltage, the common voltage is transmitted by wires to the lower substrate 22, and then to the counter electrode 36 of the upper substrate 24 by the silver paste points to diffuse the common voltage to the whole plane of the LCD 10 to make the LCD 10 have a same common voltage. However, the counter electrode 36 of the LCD 10 according to the prior art is usually composed of indium tin oxide (ITO), which has a high impedance of about 90Ω per unit area. Furthermore, silver paste points for transmitting the common voltage are only positioned in the periphery of the LCD 10 (in the non-display area 14). Therefore as the common voltage is transmitted through the silver paste points and the counter electrode 36 in the periphery portion of the LCD 10 to the counter electrode 36 in the middle portion of the LCD 10, the common voltage will have a voltage drop because of the high impedance of the counter electrode 36 composed of ITO, especially when the LCD 10 is a large-size LCD. When the size of the LCD 10 is large, the voltage drop problem will be more serious so that the common voltage of the upper substrate 24 will be so non-uniform that the LCD 10 cannot accurately maintain the turning directions of the liquid crystal molecules. Thus the LCD 10 will fail to present the best images. As a result, to provide a LCD with a uniform common voltage and the method thereof is still an important issue in LCD manufacturing and industry.

Please replace [0010] with the following paragraph:

[0010] It is therefore a primary objective of the claimed invention to provide [[an]] a LCD with a uniform common voltage and a method thereof to solve the above-mentioned problem.

5 Please replace [0011] with the following paragraph:

[0011] According to the claimed invention, a method for fabricating [[an]] a LCD with a uniform common voltage is provided. The method comprising: providing a lower substrate; forming a plurality of scan lines and a plurality of data lines on an upper surface of the lower substrate, wherein the scan lines are arranged perpendicular
10 to the data lines to form a pixel matrix comprising a plurality of pixels; then forming a plurality of common electrodes for transmitting a common voltage and a plurality of common electrode pads electrically connected to the common electrodes on the lower substrate; providing an upper substrate; forming a plurality of photo spacers on the bottom surface of the upper substrate to make each of the photo spacers correspond to
15 one of the common electrode pads; forming a conductive material layer on the bottom surface of the upper substrate to make the conductive material layer cover the surface of the photo spacers; combining the upper substrate and the lower substrate face to face by using the photo spacers to support the space between the upper substrate and the lower substrate and electrically connecting the conductive material layer covering
20 the surface of each of the photo spacers to the common electrode pads corresponding to each of the photo spacers; and filling a plurality of liquid crystal molecules in the space between the upper substrate and the lower substrate and sealing the space between the upper substrate and the lower substrate.

25 Please replace [0014] with the following paragraph:

[0014] Fig.1 is a schematic diagram of [[an]] a LCD according to the prior art.

Please replace [0016] with the following paragraph:

[0016] Fig.3 is a schematic diagram of [[an]] a LCD according to the present invention.

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Please replace [0018] with the following paragraph:

[0018] Fig.5 is a flow diagram of a method for fabricating [[an]] a LCD with a uniform common voltage according to the present invention.

10 Please replace [0019] with the following paragraph:

[0019] Please refer to Fig.3 and Fig.4. Fig.3 is a schematic diagram of [[an]] a LCD 50 according to the present invention. Fig. 4 is a section view of the structure of the LCD 50 shown in Fig.3. The present invention LCD 50 with a uniform common voltage comprises a lower substrate 52, an upper substrate 54 positioned on the lower substrate oppositely, and a plurality of liquid crystal molecules (not shown) filled between the lower substrate 52 and the upper substrate 54. The lower substrate 52 of the LCD 50 defines a display area 56 and a non-display area 58. The lower substrate 52 has a plurality of scan lines 60, a plurality of data lines 62, a plurality of pixels 64 defined by the scan lines 60 and the data lines 62 with intersection in the display area 56, a plurality of TFTs (not shown) positioned in each of the pixels 64, a plurality of common electrodes 66, a plurality of common electrode pads 68, and an alignment film 80 thereon. The common electrodes 66 and the common electrode pads 68 are composed of a metal material with a high conductivity, such as aluminum.

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Please replace [0022] with the following paragraph:

[0022] It should be noticed that the present invention method could be applied to other LCD products, for example, [[an]] a LCD with the color filter on a TFT (COT) structure or with the color filters directly on the substrate.

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Please replace [0023] with the following paragraph:

[0023] Please refer to Fig.5, which is a flow diagram of a method for fabricating [[an]] a LCD with a uniform common voltage according to the present invention. The method comprises providing a lower substrate; forming a plurality of scan lines, a plurality of common electrodes for transmitting a common voltage, and a plurality of common electrode pads electrically connected to the common electrodes on the upper surface of the lower substrate; and then forming a plurality of data lines, a plurality of pixel electrodes, and electrical elements, such as TFTs, wherein the data lines are arranged perpendicular to the scan lines to form a plurality of pixels. The present invention method also comprises providing an upper substrate, forming a plurality of photo spacers corresponding to the common electrode pads of the lower substrate on the bottom surface of the upper substrate, and then forming a conductive material layer on the surface of the photo spacers. The present invention method further comprises combining the upper substrate and the lower substrate face to face by using the photo spacers on the bottom surface of the upper substrate to support the space between the two substrates, meanwhile electrically connecting the conductive material layer covering the photo spacers to each of the common electrode pads corresponding to each of the photo spacers; filling liquid crystal molecules between the substrates; and finally sealing the space between the upper substrate and the lower substrate. The present invention also comprises forming a plurality of color filters, two alignment films, and two polarizers with 90 degree differences on the surface of the upper substrate or the lower substrate, which are technologies known by those skill in the art, and thus more detailed information is not needed.

Please replace [0024] with the following paragraph:

In contrast to the prior art, the present invention LCD uses the common electrodes on the lower substrate to transmit the common voltage to reach the goal of making the LCD have a uniform common voltage. The common electrodes on the surface of the lower substrate can be formed by a material with low impedance. In the embodiment of the present invention, the common electrodes are formed by aluminum, which has an impedance of $3-4\Omega$ per unit area. The process of forming the common electrodes can be performed together with the scan lines by a same photo-etching-process (PEP), so that the common voltage can be transmitted to the conductive material layer on the surface of each of the photo spacers effectively, thus the common voltage on the surface of the upper substrate is uniform. As a result, the display performance and quality of the present invention LCD can be improved substantially. When applying the present invention, no new complicated processes are needed, and the present invention can be applied to the fabrication of [[an]] a LCD with a large size to raise the yield rate of product.